



RIVER MURRAY WEEKLY REPORT

FOR THE WEEK ENDING WEDNESDAY, 15 DECEMBER 2010

Trim Ref: D10/36358

Rainfall and Inflows

On-going rain and storms that affected large parts of the Murray-Darling Basin during the previous two weeks continued for the first few days of this week before finally contracting east and north and gradually clearing. As a result high rainfall totals were once again recorded in many areas. In Victoria, the highest totals fell in the north-east where Mongans Bridge and Yackandandah, on the Kiewa River, received 135 mm 84 mm respectively. Higher in the ranges, Rocky Valley received 190 mm. The story was similar across the border where high totals were recorded along much of the Great Divide and adjacent slopes. Cowra, Young and Batlow all recorded over 100 mm while very heavy rain also fell around Googong Dam east of the ACT. The northern Basin did not miss out, with parts of the Warrego catchment receiving totals over 50 mm for the week.

As expected, widespread flooding continued in many tributaries across the basin, while several rivers in southern NSW and north-east Victoria rose significantly during the week with the latest rain falling on saturated catchments.

In Victoria, very significant responses on the Goulburn, Ovens, Kiewa and upper Murray catchments resulted in very high flows and renewed flooding. On the River Murray at Jingellic, the flow peaked at over 51,000 ML/day contributing to further spilling at Hume Dam (Figure 1). On the Ovens River, the flow at the Wangaratta gauge peaked at over 108,000 ML/day, while at McCoys Bridge on the Goulburn River, the flow rose to 57,000 ML/day on 14 December.

In NSW, flooding continues across many tributaries with major floodwaters from the Queanbeyan and Molonglo Rivers contributing to renewed rises along the Murrumbidgee River.

Downstream impacts resulting from the current high inflows into the River Murray will become clearer over the coming weeks, although areas of Minor to Moderate Flooding along the mid Murray, Edward and Wakool River systems over the coming weeks are being predicted. For more information regarding flood warnings see the Bureau of Meteorology at <http://www.bom.gov.au/>.

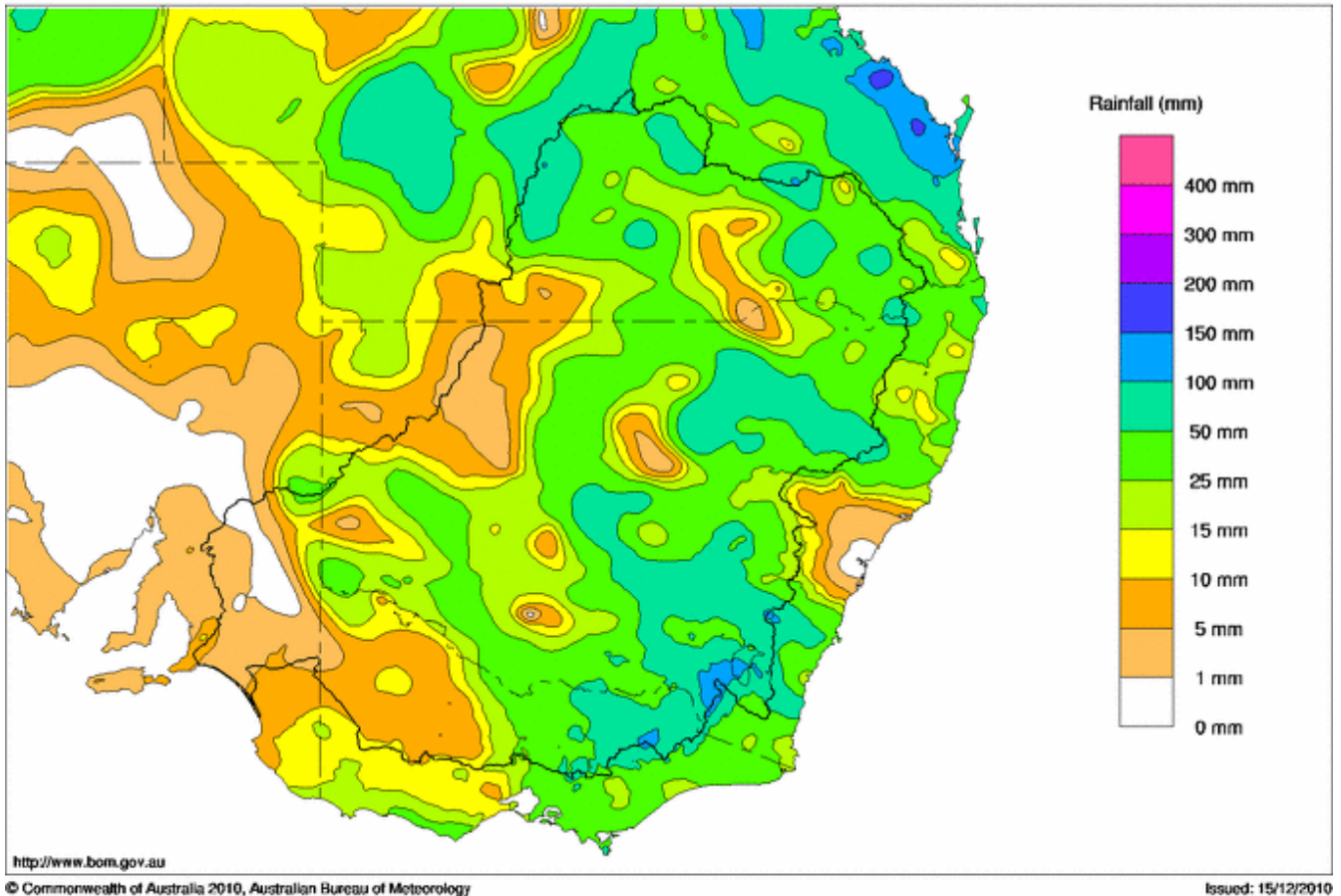


Figure 1 Hume Dam spilling floodwater at a release of 40,000 ML/day, 9th December 2010.

Photo: Tony Crawford, NSW Office of Water.



Murray Darling Rainfall Totals (mm) Week Ending 15th December 2010
Product of the National Climate Centre



http://www.bom.gov.au © Commonwealth of Australia 2010, Australian Bureau of Meteorology Issued: 15/12/2010

Map 1 - Murray-Darling Basin rainfall for the week ending 15th December 2010 (Source: Bureau of Meteorology)

River Operations

River Murray System inflows (excluding Menindee and Snowy inflows) for the month to date total around 2,000 GL – which is already more than the previous highest December inflow on record of 1,830 GL in 1992. By the end of the month the total could exceed 3,000 GL (many times the long term average of 418 GL) eclipsing the previous record by a significant margin.

MDBA active storage remains at 79% after a minor increase of 23 GL during the week. Dartmouth Reservoir continued to rise (by 56 GL this week) and now holds 2,133 GL (55%).

Total storage in Hume Reservoir is currently 2,987 GL (99%) and the dam continues to spill with a release of 40,000 ML/day maintained for much of the week. This is now being reduced as upstream flooding recedes. The flow downstream at Doctors Point is expected to return within channel over the next few days.

Release from Yarrawonga Weir was increased to 113,000 ML/day on 12 December to pass flood waters from the Ovens and Kiewa Rivers and spill from Hume Dam. Release has now been reduced to around 66,000 ML/day and is expected to be gradually reduced further over the coming week.

The ‘blackwater’ event that has resulted from widespread flooding continues downstream of Yarrawonga and there have been reports this week of Murray crays leaving the water (due to the low dissolved oxygen levels) as far down the Murray as Swan Hill. There have now been reports of isolated fish kills in the Edward/Wakool System, Goulburn and Murray Rivers. Further updates will be provided next week.



Release from Torrumbarry Weir has increased to around 50,000 ML/day as the upstream floodwaters from the Murray, Campaspe and Goulburn Rivers arrive. Flows are expected to remain around this level for the next week before beginning to recede over Christmas. The high flow rates will provide another good watering of the Koondrook–Perricoota Forest and further return flows from the forest into the Wakool River can be expected in the coming weeks.

On the Edward River, release from Stevens Weir rose to 14,000 ML/day and is expected to continue rising over the coming week. The Bureau of Meteorology is now predicting the level at Deniliquin to reach 7.0 m on 22 December. Significant rises through the Edward-Wakool system are expected over the coming weeks as floodwaters move downstream.

The Murrumbidgee River at Balranald is now around 14,200 ML/day but is expected to rise over the coming weeks as high flows from upstream arrive.

At Euston, flow rates continue rising with the release now at 43,000 ML/day and expected to continue increasing over the coming week. In the Sunraysia District, Mildura Weir has now been removed to pass high flows. This means that all weirs in between Euston and Lock 4 are currently removed. Flows through this region are expected to continue to increase steadily over the coming weeks as upstream floodwaters arrive.

The total storage in Menindee Lakes is currently 1,835 GL (106%), a reduction of 27 GL during the last week. Upstream on the Darling, the flow at Bourke continues to rise as floodwaters from a number of tributaries gradually move downstream. The Bureau of Meteorology is now forecasting flooding to increase along the Darling River over the coming weeks and into January. Release from Menindee Lakes has been increased to 19,000 ML/day over the past week and is expected to gradually rise to around 22,000 ML/day over the next week.

Total storage in Lake Victoria decreased by 33 GL to 510 GL (75%) and is expected to continue to be lowered over the coming week to assist in the protection of vegetation and cultural heritage material. Flow to South Australia has been steady during the week and is currently around 65,000 ML/day. Further information of flows in South Australia can be obtained at www.waterforgood.sa.gov.au/.

The flow over Lock 1 has averaged 49,000 ML/day. Local rain, high inflows and high tides (which are restricting Barrage outflows) have resulted in the level at the lower lakes increasing over the week to 0.83 m AHD. With lower tides expected soon, the level of the lakes is anticipated to begin falling again later in December.

For media inquiries contact the Media Officer on 02 6279 0141

DAVID DREVERMAN
Executive Director, River Murray

Week ending Wednesday 15 Dec 2010

Water in Storage

MDBA Storages	Full Supply Level (m AHD)	Full Supply Volume (GL)	Current Storage Level (m AHD)	Current Storage		Dead Storage (GL)	MDBA Active Storage (GL)	Change in Total Storage for the week (GL)
				(GL)	%			
Dartmouth Reservoir	486.00	3 856	454.92	2 133	55%	71	2 062	+56
Hume Reservoir	192.00	3 005	191.91	2 987	99%	23	2 964	+27
Lake Victoria	27.00	677	25.60	510	75%	100	410	-33
Menindee Lakes		1 731 *		1 835	106%	(480 #)	1 355	-27
Total		9 269		7 465	81%	--	6 791	+23

* Menindee surcharge capacity 2050 GL

% of Total Active MDBA Storage = **79%**

NSW takes control of Menindee Lakes when storage falls below 480 GL, and control reverts to MDBA when storage next reaches 640 GL

** All Data is rounded to nearest GL **

Major State Storages

Burrinjuck Reservoir	1 026		1 044	102%	3	1 041	+59
Blowering Reservoir	1 631		1 679	103%	24	1 655	+6
Eildon Reservoir	3 334		2 489	75%	100	2 389	+144

Snowy Mountains Scheme

Snowy diversions for week ending 14-Dec-2010

Storage	Active storage (GL)	Weekly change (GL)	Diversion (GL)	This week	From 1 May 2010
Lake Eucumbene - Total	894	+28	Snowy-Murray	+38	665
Snowy-Murray Component	570	+3	Tooma-Tumut	+15	287
Target Storage	1 510		Net Diversion	22.9	378
			Murray 1 Release	+54	1 006

Major Diversions from Murray and Lower Darling (GL) *

New South Wales			Victoria		
	This week	From 1 July 2010		This week	From 1 July 2010
Murray Irrig. Ltd (Net)	3.9	199.0	Yarrowonga Main Channel (net)	0.5	33.0
Wakool Sys Allowance	0.0	3.0	Torrumbary System + Nyah (net)	0.0	111.0
Western Murray Irrig.	0.1	3.0	Sunraysia Pumped Districts	0.4	14.0
Licensed Pumps	0.6	30.0	Licensed pumps - GMW (Nyah+u/s)	0.0	3.0
Lower Darling	10.6	110.0	Licensed pumps - LMW	9.0	108.0
TOTAL	15.2	345.0	TOTAL	9.9	269.0

* Figures derived from Estimates and Monthly Data. Please note that not all data may have been available at the time of creating this report.

** All Data is rounded to nearest 100 ML for the above**

Flow to South Australia (GL)

Entitlement this month	217.0 *	
Flow this week	444.7	(63 500 ML/day)
Flow so far this month	925.5	
Flow last month	1,245.0	

* Flow to SA will be greater than entitlement for December due to Additional Dilution Flow and Unregulated Flow s.

Salinity (EC)

(microsiemens/cm @ 25° C)

	Current	Average over the last week	Average since 1 August 2010
Swan Hill	230	220	140
Euston	180	170	130
Red Cliffs	150	130	140
Merbein	180	150	120
Burtundy (Darling)	230	220	260
Lock 9	260	250	180
Lake Victoria	170	180	170
Berri	320	320	200
Waikerie	-	-	210
Morgan	n/a	300	260
Mannum	360	320	280
Murray Bridge	270	320	290
Milang (Lake Alex)	1 360	1 320	2 760
Poltalloch (Lake Alex)	310	270	1 020
Meningie (Lake Alb.)	7 250	7 130	10 100
Goolwa Barrages	1 430	2 810	8 260

Week ending Wednesday 15 Dec 2010

River Levels and Flows

River Murray	Minor Flood stage (m)	Gauge height		Flow (ML/day)	Trend	Average flow this week (ML/day)	Average flow last week (ML/day)
		local (m)	(m AHD)				
Khancoban	-	-	-	9 760	R	10 200	9 680
Jingellic	4.0	3.18	209.70	19 010	F	27 190	17 120
Tallandoon (Mitta Mitta River)	4.2	2.07	218.96	2 530	F	3 680	1 800
Heywoods	5.5	3.55	157.18	23 620	F	33 980	22 200
Doctors Point	5.5	4.21	152.68	28 200	F	47 490	26 670
Albury	4.3	3.45	150.89	-	-	-	-
Corowa	7.0	6.06	132.08	51 890	R	42 400	30 900
Yarrowonga Weir (d/s)	6.4	6.10	121.14	71 020	F	79 990	36 320
Tocumwal	6.4	6.62	110.46	92 190	F	60 190	32 700
Torrumbarry Weir (d/s)	7.3	7.58	86.13	49 670	S	48 370	42 120
Swan Hill	4.5	4.00	66.92	25 000	R	23 800	21 750
Wakool Junction	8.8	7.86	56.98	40 740	R	39 150	36 410
Euston Weir (d/s)	8.8	5.54	47.38	43 010	R	42 080	39 960
Mildura Weir (d/s)	-	-	-	33 880	F	34 680	34 390
Wentworth Weir (d/s)	7.3	6.13	30.89	58 800	S	59 570	56 140
Rufus Junction	-	7.42	24.35	65 160	R	63 530	60 560
Blanchetown (Lock 1 d/s)	-	3.21	-	50 600	S	49 040	42 950
Tributaries							
Kiewa at Bandiana	2.7	2.81	156.04	6 040	F	13 970	5 400
Ovens at Wangaratta	11.9	11.86	149.54	24 640	F	52 730	16 370
Goulburn at McCoys Bridge	9.0	10.01	101.43	52 560	F	36 680	22 240
Edward at Stevens Weir (d/s)	-	5.60	85.37	14 000	F	13 000	11 490
Edward at Liewah	-	5.18	60.56	7 570	S	7 530	7 360
Wakool at Stoney Crossing	-	4.87	58.36	12 090	R	10 890	9 440
Murrumbidgee at Balranald	5.0	6.12	62.08	14 270	F	14 450	11 470
Barwon at Mungindi	-	4.53	-	4 180	R	4 680	6 440
Darling at Bourke	-	8.89	-	29 620	R	26 820	19 930
Darling at Burtundy Rocks	-	6.19	-	14 100	S	13 940	13 600

Natural Inflow to Hume (ie pre Dartmouth & Snowy Mountains scheme)	44 410	16 860
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Weirs and Locks

Pool levels above or below Full Supply Level (FSL)

Murray	FSL (mAHD)	u/s	d/s		FSL (mAHD)	u/s	d/s
Yarrowonga	124.90	-0.16	-	No. 7 Rufus River	22.10	+2.25	+5.05
No 26 Torrumbarry	86.05	+0.13	-	No. 6 Murtho	19.25	+0.33	+3.15
No. 15 Euston	47.60	+0.10	-	No. 5 Renmark	16.30	+0.07	+2.95
No. 11 Mildura	34.40	-43.40	+2.58	No. 4 Bookpurnong	13.20	+0.87	+4.07
No. 10 Wentworth	30.80	+0.20	+3.49	No.3 Overland Corner	9.80	+0.19	+3.48
No. 9 Kulnine	27.40	+0.38	+3.11	No. 2 Waikerie	6.10	+0.90	+3.57
No. 8 Wangumma	24.60	+1.49	+3.81	No 1. Blanchetown	3.20	+0.11	+2.46

Murrumbidgee	FSL (m AHD)	relation to FSL	d/s gauge ht.		Flow (ML/day)
			local (m)	(m AHD)	
No. 7 Maude	75.40	+0.37	6.3	75.65	19742
No. 5 Redbank	66.90	+0.22	5.819	67.119	11100

Lower Lakes

FSL = 0.75 m AHD

	(m AHD)
Lake Alexandrina average level for the past 5 days	0.83

Barrages

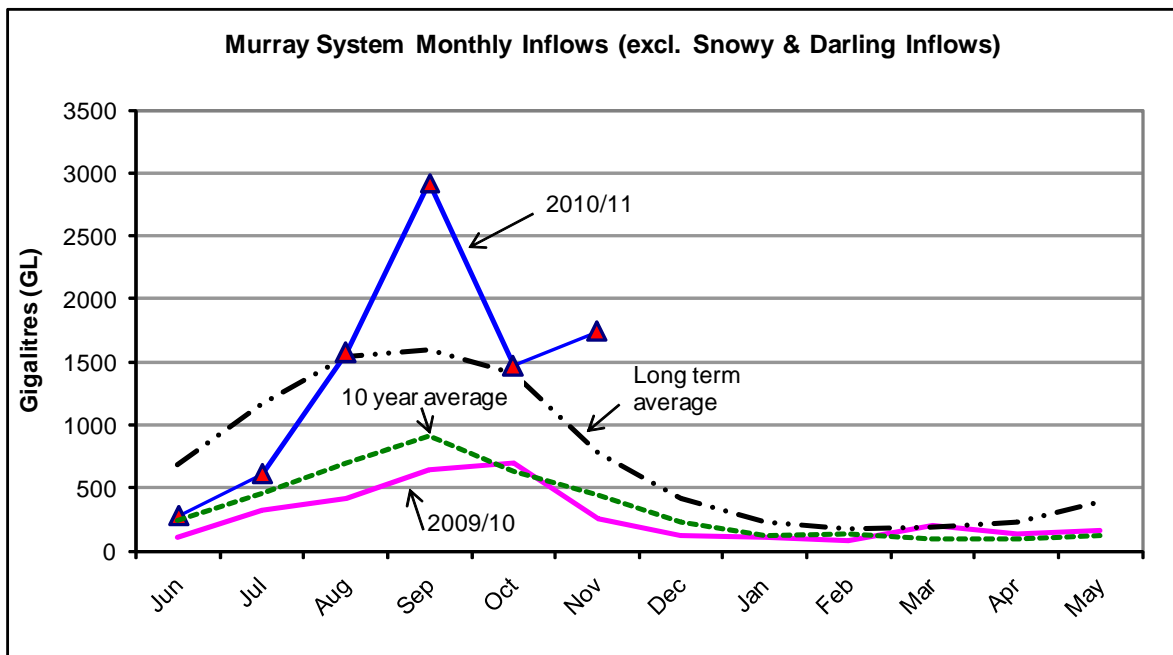
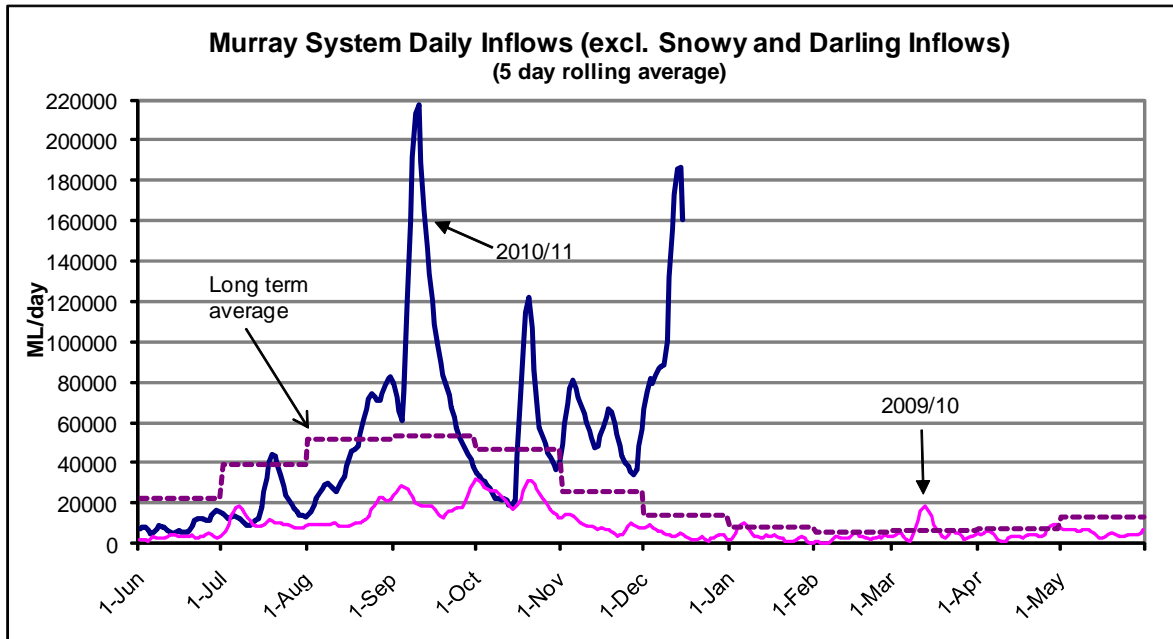
Fishways @ Barrages

	Openings	Level (m AHD)	Status	Rock Ramp	Vertical Slot
Goolwa	128 openings	0.51	104	-	Open
Mundoo	26 openings	0.52	3	-	-
Boundary Creek	6 openings	-	6	-	-
Ewe Island	111 gates	-	59	-	-
Tauwicheere	322 gates	0.63	167	Open	Open

AHD = Level relative to Australian Height Datum, i.e. height above sea level



Week ending Wednesday 15 December 2010



State Allocations (as at 15 December 2010)

NSW - Murray Valley

High security	97%
General security	100%

Victoria - Murray Valley

High reliability	100%
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NSW - Murrumbidgee Valley

High security	95%
General security	100%

Victoria - Goulburn Valley

High reliability	100%
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NSW - Lower Darling

High security	100%
General security	100%

South Australia - Murray Valley

High security	67%
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NSW : <http://www.water.nsw.gov.au/About-us/Media-releases/media/default.aspx>

VIC : <http://www.g-mwater.com.au/water-resources/allocations/current.asp>

SA : <http://www.waterforgood.sa.gov.au/category/news/>

